PHILIPS

Philips LCD Monitor Electronic User's Manual



- Safety Precautions and Maintenance
- Installation Locations
- FAQs
- Troubleshooting
- Regulatory Information
- Other Related Information

Safety and Troubleshooting Information

Safety precautions and maintenance



WARNING: Use of controls, adjustments or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards and/or mechanical hazards.

Read and follow these instructions when connecting and using your computer monitor:

- Unplug the monitor if you are not going to use it for an extensive period of time.
- Unplug the monitor if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use alcohol, solvents or ammonia-based liquids.
- Consult a service technician if the monitor does not operate normally when you have followed the instructions in this manual.
- The casing cover should be opened only by qualified service personnel.
- Keep the monitor out of direct sunlight and away from stoves or any other heat source.
- Remove any object that could fall into the vents or prevent proper cooling of the monitor's electronics.
- Do not block the ventilation holes on the cabinet.
- Keep the monitor dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- When positioning the monitor, make sure the power plug and outlet are easily accessible.
- If turning off the monitor by detaching the power cable or DC power cord, wait for 6 seconds before attaching the power cable or DC power cord for normal operation.
- To avoid the risk of shock or permanent damage to the set, do not expose the monitor to rain or excessive moisture.
- IMPORTANT: Always activate a screen saver program during your application. If a still image in high contrast remains on the screen for an extended period of time, it may leave an 'after-image' or 'ghost image' on front of the screen. This is a well-known phenomenon that is caused by the shortcomings inherent in LCD technology. In most cases, the after-image will disappear gradually over a period of time after the power has been switched off. Be aware, that the after-image symptom cannot be repaired and is not covered under warranty.

Consult a service technician if the monitor does not operate normally when the operating instructions given in this manual have been followed.

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Installation Locations

- Avoid exposure to heat and extreme cold.
- Do not store or use the LCD monitor in locations exposed to heat, direct sunlight or extreme cold.
- Avoid moving the LCD monitor between locations with large temperature differences. Choose a site that falls within the following temperature and humidity ranges.
 - o Temperature: 5-35°C 41-95°F
 - o Humidity: 20-80% RH
- Do not subject the LCD monitor to severe vibration or high impact conditions. Do not place the LCD monitor in the trunk of a car.
- Take care not to mishandle this product by either knocking or dropping it during operation or transportation.
- Do not store or use the LCD monitor in locations where there is a high level of humidity or in dusty environments. Do not allow water or other liquids to spill on or into the LCD monitor.

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About This Guide

Notational Descriptions

About This Manual

About This Guide

This electronic user's guide is intended for anyone who uses the Philips LCD Monitor. It describes the LCD monitor's features, setup, operation and other important information. Its contents are identical to the information in our printed version.

It includes the following sections:

- Safety and Troubleshooting Information provides tips and solutions for common problems as well as other related information you may need.
- About This Electronic User's Manual gives an overview of information included, along with notation icon descriptions and other documentation for your reference.
- Product Information gives an overview of the monitor's features as well as the technical specifications for this monitor.
- Installing Your Monitor describes the initial setup process and gives an overview of how to use the monitor.
- On-Screen Display provides information on adjusting the settings on your monitor.
- Customer Care and Warranty contains a list of worldwide Philips Consumer Information
 Centers along with help desk phone numbers and information on the warranty applicable
 to your product.
- Glossary defines technical terms.
- Download and Print Option transfers this entire manual to your hard drive for easy reference.

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Notational Descriptions

The following subsections describe notational conventions used in this document.

Notes, Cautions and Warnings

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold or italic type. These blocks contain notes, cautions or warnings. They are used as follows:



NOTE: This icon indicates important information and tips that help you make better use of your computer system.



CAUTION: This icon indicates information that tells you how to avoid either potential damage to hardware or loss of data.



WARNING: This icon indicates the potential for bodily harm and tells you how to avoid the problem.

Some warnings may appear in alternate formats and may not be accompanied by an icon. In such cases, the specific presentation of the warning is mandated by the relevant regulatory authority.

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- Product Features
- Lead-free Product
- Technical Specifications
- Resolution & Preset Modes
- Philips Pixel
 Defect Policy
- Automatic
 Power Saving
- Physical Specification
- Pin Assignment
- Product Views
- Physical Function

Product Information

Product Features

170C5

Outstanding front of screen performance

- Fast response time capable of handling fast moving pictures
- sRGB ensures color matching between display and printouts
- SXGA 1280 x 1024 resolution for sharper display

• Design that complements any interior

- o Elegant, sleek design complements your home décor
- Compact and slim design saves space and fits anywhere

Best value for money

- TCO guarantees the highest safety and ergonomics standards
- The lower power consumption than industry average

Great convenience

- Embedded power supply eliminates external power adaptors
- Auto adjustment for perfect picture display with one touch
- Easily adjust display settings with Philips SmartControl
- Cable clip manages cables for a tidy work space
- Detachable base for easy moving and storage
- Screen tilts for comfortable viewing from any angle

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Lead-free Product



Philips eliminated toxic substances like lead from its displays. Lead-free display helps protect your health and promotes environmentally sound recovery and disposal of waste from electrical and electronic equipment. Philips complies with the European Community stringent RoHS Directive mandating restrictions on hazardous substances in electrical and electronic equipment. With Philips, you can be confident that your display device does not harm the environment.

Technical Specifications*

LCD PANEL	
• Type	TFT LCD

Screen size	17" / 43.3 cm diagonal
Pixel Pitch	0.264 x 0.264 mm
• LCD Panel type	1280 x 1024 pixels R.G.B. vertical stripe Anti-glare polarizer, hard coated
Effective viewing area	337.9 x 270.3 mm
Display Colors	16M colors
SCANNING	
Vertical refresh rate	56 Hz-76 Hz
Horizontal Frequency	30k Hz-82 kHz
VIDEO	
Video dot rate	135 MHz
Input impedance	
- Video	75 ohm
- Sync	2.2K ohm
Input signal levels	0.7 Vpp
Sync input signal	Separate sync Composite sync Sync on green
Sync polarities	Positive and negative
Video interface	D-Sub (analog)
Optical characteristics	''
Contrast ratio	500:1 (typ.)
Brightness	250 cd/m ² (typ.)
Peak contrast angle	6 o'clock
White Chromaticity	x: 0.283 y: 0.297 (at 9300°K) x: 0.313 y: 0.329 (at 6500°K) x: 0.313 y: 0.329 (at sRGB)
• Viewing Angle (C/R <u>></u> 5)	Upper 85° (typ.) Lower 75° (typ.) Left 80° (typ.) Right 80° (typ.)

sRGB is a standard for ensuring correct exchange of colors between different devices (e.g. digital cameras, monitors, printers, scanners, etc.)

Using a standard unified color space, sRGB will help represent pictures taken by an sRGB compatible device correctly on your sRGB enabled Philips monitors. In that way, the colors are calibrated and you can rely on the correctness of the colors shown on your screen.

Important with the use of sRGB is that the brightness and contrast of your monitor is fixed to a predefined setting as well as the color gamut. Therefore it is important to select the sRGB setting in the monitor's OSD.

To do so, open the OSD by pressing the OK button on the front of your monitor. Use the down button to go to Adjust Color and press OK again. Then move the down button to go to sRGB and press OK again.

Exit this OSD.

After this, please do not change the brightness or contrast setting of your monitor. If you change either of these, the monitor will exit the sRGB mode and go to a color temperature setting of 6500K.

* This data is subject to change without notice.

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Resolution & Preset Modes

• Maximum 1280 x 1024 at 75 Hz

Recommended 1280 x 1024 at 60 Hz

16 user definable modes

15 factory preset modes:

H. freq (kHz)	Resolution	V. freq (Hz)
31.5	640*350	70
31.5	720*400	70
31.5	640*480	60
35.0	640*480	67
37.5	640*480	75
35.2	800*600	56
37.9	800*600	60
46.9	800*600	75
49.7	832*624	75
48.4	1024*768	60
60.0	1024*768	75
69.0	1152*870	75
71.8	1152*900	76
63.9	1280*1024	60
80.0	1280*1024	75

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Automatic Power Saving

If you have VESA DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If an input from a keyboard, mouse or other input device is detected, the monitor will 'wake up' automatically. The following table shows the power consumption and signaling of this automatic power saving feature:

	Powe	er Manageme	ent Definition		
VESA Mode	Video	H-sync	V-sync	Power Used	LED color
Active	ON	Yes	Yes	< 35 W	Green
Sleep	OFF	No	No	< 1 W	Amber
Switch Off	OFF	-	-	< 1W	Off

This monitor is ENERGY STAR® compliant. As an ENERGY STAR® Partner, PHILIPS has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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Physical Specifications

• Dimension (WxHxD) * 399 x 390 x 174 mm (incl. Pedestal)

• Weight 5.1 kg

• Tilt -5° ~ 25°

• Power supply 100 — 240 VAC, 60 — 50 Hz

• Power consumption 30 W* (typ.)

• Temperature 5° C to 40° C (operating)

-20° C to 60° C (storage)

• Relative humidity 20% to 80%

• System MTBF 50K hours (including CCFL 40K hours)

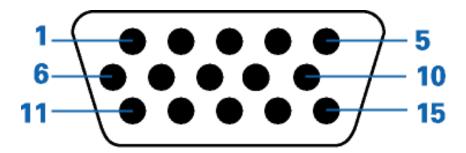
* This data is subject to change without notice.

* Resolution 1280x1024, standard size, brightness max., contrast 50%, 9300° K, full white pattern.

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Pin Assignment

The 15-pin D-sub connector (male) of the signal cable:



Pin No.	Assignment	Pin No.	Assignment
1	Red video input	9	+5V
2	Green video input/SOG	10	Logic ground
3	Blue video input	11	Ground
4	Sense (GND)	12	Serial data line (SDA)
5	Hot Plug Detect	13	H. Sync / H+V
6	Red video ground	14	V. Sync (VCLK for DDC)
7	Green video ground	15	Data clock line (SCL)
8	Blue video ground		

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Product Views

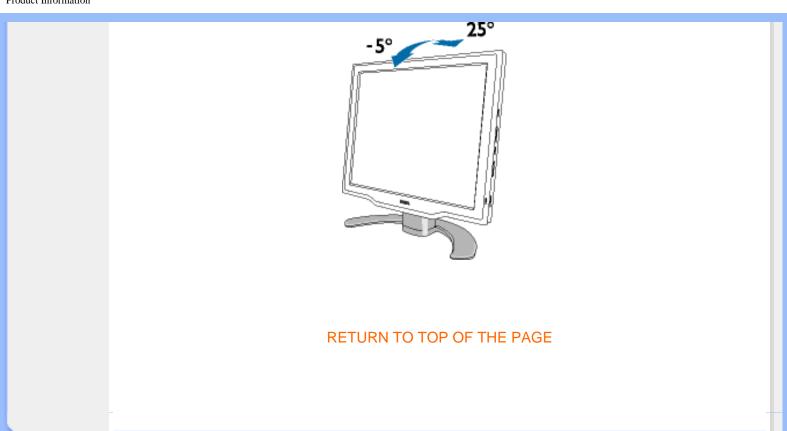
Follow the links to see various views of the monitor and its components.

Front View Product Description

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Physical Function

1) Tilt

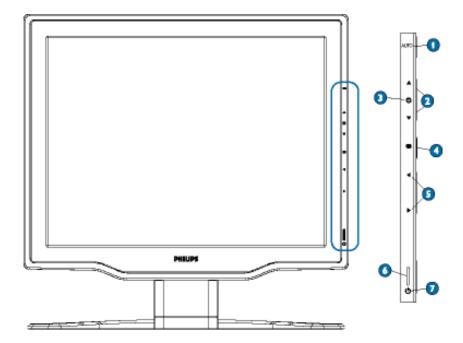


Installing Your LCD Monitor

Front View

- Produt Description Connecting
- to Your PC
- Base
 - Getting
- Started
- **Optimizing** Performance

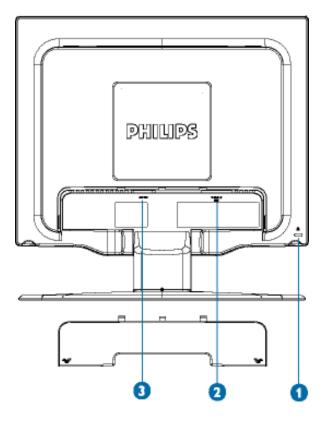
Front View Product Description



- AUTO 1
- Automatically adjust the horizontal position, vertical position, phase and clock setting.
- 2
- UP and DOWN buttons are used when adjusting the OSD of your monitor.
- 3
- BRIGHTNESS hotkey. When the UP and DOWN arrow buttons are pressed, the adjustment controls for the BRIGHTNESS will show up.
- 4
- OK button which when pressed will take you to the OSD controls.
- 5
- LEFT and RIGHT buttons, like the UP and DOWN buttons, are also used in adjusting the OSD of your monitor.
- 6
- Power LED
- 7
- POWER button switches your monitor on.

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Rear View



- 1 Kensington anti-thief lock
- 2 VGA input
- 3 AC power input

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Optimizing Performance

For best performance, ensure that your display settings are set at 1280x1024, 60Hz.



Note: You can check the current display settings by pressing the 'OK' button once. Go into the Product Information. The current display mode is shown on the item called RESOLUTION.

 You can also install the Flat Panel Adjust (FP Adjust) program, a program for getting the best performance out of your monitor. This is included on this CD. Step-by-step instructions are provided to guide you through the installtion process. Click on the link to know more about this program.



 Description of the On-Screen Display The OSD

- SmartControl
- Q&A

Tree

On-Screen Display

Description of the On Screen Display

What is the On-Screen Display?

This is a feature in all Philips LCD monitors. It allows an end user to adjust screen performance of the monitors directly through an on-screen instruction window. The user interface provides user-friendliness and ease-of-use when operating the monitor.

Basic and simple instruction on the control keys.

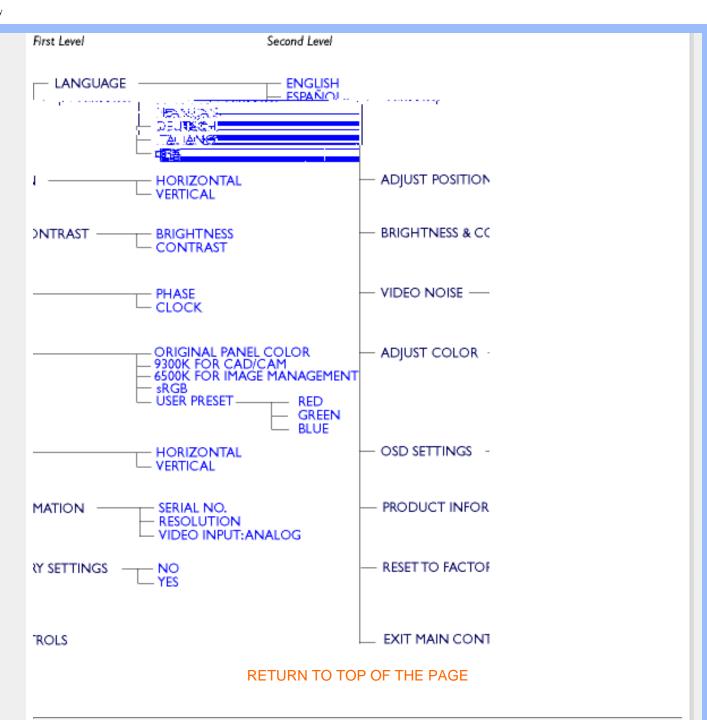
When you press the **OK** button on the side control of your monitor, the On-Screen Display (OSD) Main Controls window will pop up and you can then start making adjustments to your monitor's various features. Use the **OK** or the **OK** keys to make your adjustments.



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The OSD Tree

Below is an overall view of the structure of the On-Screen Display. You can use this as a reference when you want to work your way around the different adjustments later on.



SmartControl

It's a convenient alternative for adjusting monitor performances and settings through a software interface.

SmartControl displays a properties control panel to adjust the brightness, contrast, color temperature, position and other settings. SmartControl also displays hardware information including the model, serial number, run hours from the interface.

The SmartControl is deployed and installed in computers using Philips monitors. So the monitors and PC can interact with the Administrator's inquiries.

1. Requirement

- All graphic cards with nVIDIA and ATI graphic chipsets which support DDC/CI interface
- Microsoft Windows 2000 and XP operation systems.
- All Philips monitors supporting DDC/CI interface

2. Installation

How to download "SmartControl Installation " file:

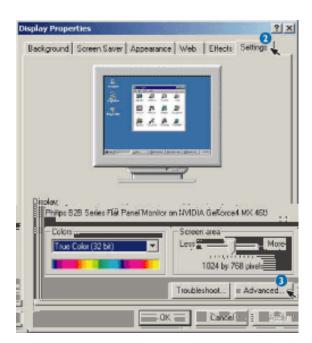
Please follow the guidance in the SmartControl installation program.

3. Accessing SmartControl

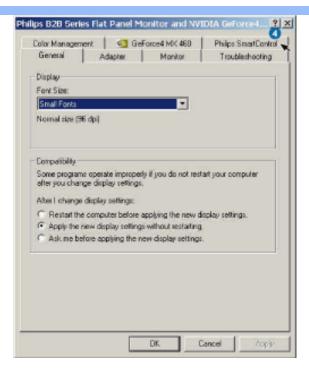
 Right click on the desktop of your PC, and select Properties from the shortcut menu pops up.



• Click on **Settings** tab, and click on **Advanced** button.

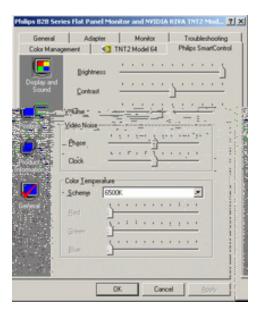


• Click Philips SmartControl tab.



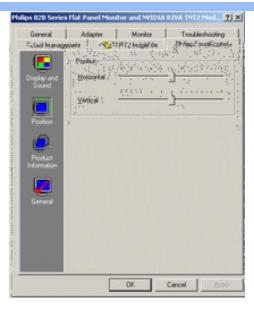
4. SmartControl Options

Display and Sound
By moving the sliding bar toward left or right, users will be able to adjust brightness, contrast,
volume (if applicable), video noise (not applicable when using DVI-D input), and color
temperatures.

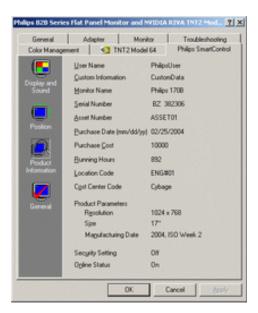


Position

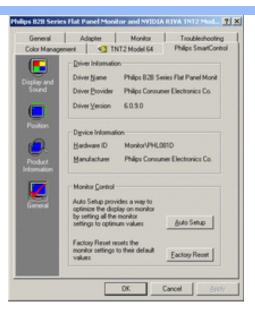
Users can adjust the horizontal and vertical position of the screen by moving the sliding bar left and right. This function is disabled when using DVI-D (digit) input.



 Product Information
 Click Product Information in the left pane to view the product information stored in the monitor's memory.



General
 Click on general, users will be able to know some general information such as driver information, device information and monitor control.



Within monitor control, users can click on Auto Setup to achieve optimum performance or click on factory reset to reset the parameters of the monitor. Such choices are disabled when using DVI-D (digit) input.

Q&A

Q1. What is SmartControl?

A. SmartControl is a control panel extension, which helps users to adjust monitor performances and settings by a software interface, instead of the hardware buttons at the front bezel of the monitors.

Q2. I change the monitor on a PC to a different one and the SmartControl becomes un-usable, what do I do?

A. Restart your PC and see if SmartControl can work. Otherwise, you will need to remove and reinstall SmartControl to ensure proper driver is installed.

Q3. The SmartControl functions well at the beginning, but it is not workable, what can I do?

A. If the following actions were executed, the monitor driver may need to be re-installed.

- Change video graphic adapter to another one
- Update video driver
- Activities on OS, such as service pack or patch
- Run Windows Update and updated monitor and/or video driver
- Windows was booted with the monitor power off or disconnected.

To find out, please right click My Computer and click on Properties->Hardware-> Device Manager. If you see "Plug and Play Monitor" shows under Monitor, then you need to re-install. Simply remove SmartControl and re-install it.

Q4. After installing SmartControl, when clicking on SmartControl tab, nothing shows up after a while or a failure message shows, what happened?

A. It might be your graphic adaptor is not compatible with the SmartControl. If your graphic adaptor is one of the above mentioned brands, try to download the most updated graphic adaptor driver from corresponding companies' web site. Install the driver. Remove SmartControl, and re-install it

once more.

If it is still not working, we are sorry that the graphic adaptor is not supported. Please pay attention to Philips' web site for any updated SmartControl driver available.

- Q5. When I click on Product Information, only partial information is shown, what happened?
- **A.** It might be your graphic card adaptor driver is not the most updated version which fully supporting DDC/CI interface. Please try to download the most updated graphic adaptor driver from corresponding companies' web site. Install the driver. Remove SmartControl, and re-install it once more.
- **Q6.** In a monitor with the LightFrame feature, when LightFrame is enabled, sRGB adjustment in SmartControl is not responding, why?
- **A.** When LightFrame is enabled, the sRGB adjustment is disabled automatically. To use sRGB, you need to disable LightFrame first.

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Customer Care & Warranty

PLEASE SELECT YOUR COUNTRY/AREA TO REVIEW DETAILS OF YOUR WARRANTY COVERAGE

WESTERN EUROPE: Austria • Belgium • Cyprus • Denmark • France • Germany • Greece • Finland • Ireland • Italy • Luxembourg • the Netherlands • Norway • Portugal • Sweden • Switzerland • Spain • United Kingdom

EASTERN EUROPE: Czech Republic • Hungary • Poland • Russia • Slovakia • Slovenia • Turkey

LATIN AMERICA: Antilles • Argentina • Brasil • Chile • Colombia • Mexico • Paraguay • Peru • Uruguay • Venezuela

NORTH AMERICA: Canada • USA

PACIFIC: Australia • New Zealand

ASIA: Bangladesh • China • Hong Kong • India • Indonesia • Japan • Korea • Malaysia • Pakistan • Philippines • Singapore • Taiwan • Thailand

AFRICA: Morocco • South Africa

MIDDLE EAST: Dubai • Egypt

Glossary

ΑI	3 C	D	E F	Gŀ	HIJ	KL	MΝ	1 O F	Q	R S	3 T	U V	WX	ΥZ
----	-----	---	------------	----	-----	----	----	-------	---	-----	-----	-----	----	----

C

Color temperature

A way of describing the color of a radiating source in terms of the temperature (in degrees Kelvin) of a black body radiating with the same dominant frequency as the source.

Most Philips monitors offer the possibility of setting the color temperature to any desired value.

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D

D-SUB

Your monitor comes with a D-Sub cable.

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Ε

Energy Star Computers Program

An energy conservation program launched by the US Environmental Protection Agency (EPA),
promotes the manufacture and marketing of energy-efficient office automation equipment.
Companies joining this program, must be willing to commit themselves to manufacture one or more
products capable of going into a low -power state (< 30 W) either after a period of inactivity, or after
a predetermined time selected by the user.

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L

LCD Liquid Crystal Display

An alphanumeric display, using the unique properties of liquid crystal, to form characters. The latest flat-panel displays, contains a matrix of hundreds or thousands of individual LCD cells that generate text and colorful graphics on a screen. They consume little power, though they do require external lighting to make them legible to the user.

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S

SmartControl |

A PC software user interface for fine tuning monitor performance and making display adjustments.

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Vertical refresh rate

Expressed in Hz, it is the number of frames (complete pictures) written to the screen every second.

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Installing your LCD monitor driver

- Download and Printing Instructions Installing
- FPadjust Program

Download and Print

Installing Your LCD monitor driver

System requirements:

- PC running Windows 95, Windows® 98, Windows® 2000, Windows® Me, Windows® XP or later
- Find your driver ".inf/.icm/.cat" at : lcd\pc\drivers

Read the "Driver_install02.txt" file before installing.

This page provides an option to read the manual in .pdf format. PDF files can be downloaded into your hard disk, then viewed and printed with Acrobat Reader or through your browser.

If you do not have Adobe® Acrobat Reader installed, click on the link to install the application. Adobe® Acrobat Reader for PC / Adobe® Acrobat Reader for Mac.

Download instructions:

To download the file:

1. Click-and-hold your mouse over the icon below. (Windows® 95/98/2000/Me/XP users right-click)

Download



170C5.pdf

Download



150C5.pdf

- 2. From the menu that appears, choose 'Save Link As...', 'Save Target As...' or 'Download Link to Disk'.
- 3. Choose where you would like to save the file; click 'Save' (if prompted to save as either 'text' or 'source', choose 'source').

Printing instructions:

To print the manual:

1. With the manual file open, follow your printer's instructions and print the pages you need.

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Installing FPadjust Program

The FP Adjust program generates alignment patterns which will help you adjust monitor settings such as CONTRAST, BRIGHTNESS, HORIZONTAL & VERTICAL POSITION, PHASE and CLOCK.

System requirements:

PC running Windows® 95, Windows® 98, Windows® 2000, Windows® Me, Windows® XP or later

To install FPadjust Program:

- Click on the link or icon to install FPadjustment Program.
 or
- Click-and-hold your mouse over the icon. (Win95/98/2000/Me/XP users right-click)

Download



FP_setup04.exe

- From the menu that appears, choose 'Save Link As...', 'Save Target As...' or 'Download Link to Disk'.
- Choose where you would like to save the file; click 'Save' (if prompted to save as either 'text' or 'source', choose 'source').
- Exit your browser and install the FPadjust Program.

Read the "FP_Readme04.txt" file before installing.



- Safety and Troubleshooting
- General FAQs
- ScreenAdjustments
- Compatibility with Other Peripherals
- LCD Panel Technology
- Ergonomics, Ecology and Safety Standards
- Troubleshooting
- Regulatory Information
- Other Related Information

FAQs (Frequently Asked Questions)

General FAQs

Q: When I install my monitor what should I do if the screen shows 'Cannot display this video mode'?

A: Recommended video mode for Philips 17": 1280x1024 @60Hz.

- 1. Unplug all cables, then connect your PC to the monitor that you used previously.
- 2. In the Windows Start Menu, select Settings/Control Panel. In the Control Panel Window, select the Display icon. Inside the Display Control Panel, select the 'Settings' tab. Under the setting tab, in box labeled 'desktop area', move the slidebar to 1280x1024 pixels (17").
- 3. Open 'Advanced Properties' and set the Refresh Rate to 60Hz, then click OK.
- 4. Restart your computer and repeat step 2 and 3 to verify that your PC is set at 1280x1024@60Hz (17").
- 5. Shut down your computer, disconnect your old monitor and reconnect your Philips LCD monitor.
- 6. Turn on your monitor and then turn on your PC.

Q: What should I do when screen shows: THIS IS 85HZ OVERDRIVE, CHANGE COMPUTER DISPLAY INPUT TO 1280 x 1024 @60HZ?

A: It means the signal input from your PC is 85Hz -- outside the range that the monitor can display. New Generation LCD intelligent monitor capabilities temporarily override the overscan, providing you with 10 minutes to reset timing to recommended settings.

Here's how:

Go to your Windows Start menu. Select *Settings*, then *Control Panel*. Select *Display*. Move to *Settings* and click on the *Advanced* button. Under *Adaptor*, change the refresh rate to 56~75.

You have 10 minutes to complete the operation; if you do not complete within 10 minutes, power off and re-power on monitor to enter changes.

Q: What does 'refresh rate' mean in connection with an LCD monitor?

A: The refresh rate is of much less relevance for LCD monitors. LCD monitors display a stable, flicker-free image at 60Hz. There is no visible difference between 85Hz and 60Hz.

Q: What are the .inf and .icm files on the CD-ROM? How do I install the drivers (.inf and . icm)?
A: These are the driver files for your monitor. Follow the instructions in your user manual to install the drivers. Your computer may ask you for monitor drivers (.inf and .icm files) or a driver disk when you first install your monitor. Follow the instructions to insert the driver disk (either floppy or CD-ROM) included in this package. Monitor drivers (.inf and .icm files) will be installed automatically.
Q: How do I adjust the resolution?
A: Your video card/graphic driver and monitor together determine the available resolutions. You can select the desired resolution under Windows® 95/98 with the 'Display properties/ Settings' control panel.
Q: What if I get lost when I am making monitor adjustments?
A: Simply press the OSD button, then select 'Reset' to recall all of the original factory settings.
Q: What is the Auto function?
A: The AUTO adjustment key restores the optimal screen position, phase and clock settings at the press of a single button – without the need to navigate through OSD menus and control keys.
Q: My Monitor has no power (Power LED does not light up). What should I do?
A: Make sure the AC power cord is connected to the Monitor.
Q: Will the LCD monitor accept an Interlace signal?
A: No. If an Interlace signal is used, the screen displays both odd and even horizontal scanning lines at the same time, thus distorting the picture.
Q: What does the Refresh Rate mean for LCD?

A: Unlike CRT display technology, in which the speed of the electron beam is swept from the top to the bottom of the screen determines flicker, an active matrix display uses an active element (TFT) to control each individual pixel and the refresh rate is therefore not really applicable to LCD technology.
Q: Will the LCD screen be resistant to scratches?
A: A protective coating is applied to the surface of the LCD, which is durable to a certain extent (approximately up to the hardness of a 2H pencil). In general, it is recommended that the panel surface is not subject to any excessive shocks or scratches. An optional protective cover with greater scratch resistance is also available.
Q: How should I clean the LCD surface?
A: For normal cleaning, use a clean, soft cloth. For extensive cleaning, please use isopropyl alcohol. Do not use other solvents such as ethyl alcohol, ethanol, acetone, hexane, etc.
Q: Can the Philips LCD Monitor be mounted on the wall or used as a touch panel? A: Yes. Philips LCD monitors have this optional feature. The standard VESA mount holes on
the back cover allows the user to mount the Philips monitor on any VESA standard ARM or accessories. Touch panels are being developed for future applications. Check with your Philips sales representative for more information.
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Screen Adjustments
Q: What is the FPadjust program on the CD-ROM?
A: The FPadjust program generates alignment patterns that help you adjust monitor settings such as Contrast, Brightness, Horizontal Position, Vertical Position, Phase and Clock for optimal performance.
Q: When I install my monitor, how do I get the best performance from the monitor?

A:

- For best performance, make sure your display settings are set at 1280x1024@60Hz for 17".
 Note: You can check the current display settings by pressing the OSD OK button once.
 The current display mode is shown in product information in OSD main controls.
- 2. To install the Flat Panel Adjust (FPadjust) program located on the monitor setup CD-ROM, open the CD-ROM and double-click the FP_setup04.exe icon. This will install FP Adjust automatically and place a shortcut on your desktop.
- 3. Run FPadjust by double clicking the shortcut. Follow the instructions step by step to optimize image performance with your system's video controller.

Q: How do LCDs compare to CRTs in terms of radiation?

A: Because LCDs do not use an electron gun, they do not generate the same amount of radiation at the screen surface.

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Compatibility with other Peripherals

Q: Can I connect my LCD monitor to any PC, workstation or Mac?

A: Yes. All Philips LCD monitors are fully compatible with standard PCs, Macs and workstations. You may need a cable adapter to connect the monitor to your Mac system. Please contact your dealer/retailer for more information.

Q: Are Philips LCD monitors Plug-and-Play?

A: Yes, the monitors are Plug-and-Play compatible with Windows® 95, 98, 2000 and the PC98/99 platforms.

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LCD Panel Technology

Q: What is a Liquid Crystal Display?

A: A Liquid Crystal Display (LCD) is an optical device that is commonly used to display

ASCII characters and images on digital items such as watches, calculators, portable game consoles, etc. LCD is the technology used for displays in notebooks and other small computers. Like light-emitting diode and gas-plasma technologies, LCD allows displays to be much thinner than cathode ray tube (CRT) technology. LCD consumes much less power than LED and gas-displays because it works on the principle of blocking light rather than emitting it.
Q: How are LCDs made?
A: LCDs are created from two glass plates separated from each other at a distance of a few microns. The plates are filled with liquid crystal and then sealed together. The top plate is colored with an RGB pattern to make the color filter. Polarizers are then glued to both plates. This combination is sometimes called 'glass' or 'cell.' The LCD cell is assembled into a 'module' by adding the backlight, driver electronics and frame.
Q: What is polarization ?
A: Polarization is basically directing light to shine in one direction. Light is electromagnetic waves. Electric and magnetic fields oscillate in a direction perpendicular to the propagation of the light beam. The direction of these fields is called the 'polarization direction'. Normal or non-polarized light has fields in several directions; polarized light has a field in only one direction.
Q: What differentiates passive matrix LCDs from active matrix LCDs?
A: An LCD is made with either a passive matrix or an active matrix display grid. An active matrix has a transistor located at each pixel intersection, requiring less current to control the luminance of a pixel. For this reason, the current in an active matrix display can be switched on and off more frequently, improving the screen refresh time (your mouse pointer will appear to move more smoothly across the screen, for example). The passive matrix LCD has a grid of conductors with pixels located at each intersection in the grid.
Q: How does a TFT LCD Panel work?

A: On each column and row of the TFT LCD panel, a data source drive and a gate drive are attached, respectively. The TFT drain of each cell is connected to the electrode. The molecular arrangement of liquid crystal elements differ according to whether it is impressed with voltage or not. It varies the direction of polarized light and the amount of light by letting it through different arrays of liquid crystal elements. When two polarized filters are arranged vertically on a polarized light pole, the light that passes through the upper polarized panel is turned 90 degrees along with the spiral structure of the liquid crystal molecules and goes through the polarized filter at the bottom. When impressed with voltage, liquid crystal molecules are arranged vertically from the original spiral structure and the direction of the

light is not turned through 90 degrees. In this case, light that comes through the top polarized panel may not go through the polarized panel at the bottom.
Q: What are the advantages of TFT LCD compared with CRT?
A: In a CRT monitor, a gun shoots electrons and general light by colliding polarized electrons on fluorescent glass. Therefore, CRT monitors basically operate with an analog RGB signal. A TFT LCD monitor is a device that displays an input image by operating a liquid crystal panel. The TFT has a fundamentally different structure than a CRT: Each cell has an active matrix structure and independent active elements. A TFT LCD has two glass panels and the space between them is filled with liquid crystal. When each cell is connected with electrodes and impressed with voltage, the molecular structure of the liquid crystal is altered and controls the amount of inlet lighting to display images. A TFT LCD has several advantages over a CRT, since it can be very thin and no flickering occurs because it does not use the scanning method.
Q: Why is vertical frequency of 60Hz optimal for an LCD monitor?
A: Unlike a CDT monitor, the TFT LCD panel has a fixed resolution. For example, an XGA monitor has 1024x3 (R, G, B) x 768 pixels and a higher resolution may not be available without additional software processing. The panel is designed to optimize the display for a 65MHz dot clock, one of the standards for XGA displays. Since the vertical/horizontal frequency for this dot clock is 60Hz/48kHz, the optimum frequency for this monitor is 60Hz.
Q: What kind of wide-angle technology is available? How does it work?
A: The TFT LCD panel is an element that controls/displays the inlet of a backlight using the dual-refraction of a liquid crystal. Using the property that the projection of inlet light refracts toward the major axis of the liquid element, it controls the direction of inlet light and displays it. Since the refraction ratio of inlet light on liquid crystal varies with the inlet angle of the light, the viewing angle of a TFT is much narrower than that of a CDT. Usually, the viewing angle refers to the point where the contrast ration is 10. Many ways to widen the viewing angle are currently being developed and the most common approach is to use a wide viewing angle film, which widens the viewing angle by varying the refraction ratio. IPS (In Plane Switching) or MVA (Multi Vertical Aligned) is also used to give a wider viewing angle.
Q: Why is there no flicker on an LCD Monitor?
A: Technically speaking, LCDs do flicker, but the cause of the phenomenon is different from that of a CRT monitor and it has no impact of the ease of viewing. Flickering in an LCD

monitor relates to usually undetectable luminance caused by the difference between

positive and negative voltage. On the other hand, CRT flickering that can irritate the human eye occurs when the on/off action of the fluorescent object becomes visible. Since the reaction speed of liquid crystal in an LCD panel is much slower, this troublesome form of

 $file: ///D|/My\%20Documents/dfu/C_model/english/170c5/safety/saf_faq.htm~(6~of~7)2004-11-29~8:10:34~AM~(6~of~7)2004-11-29~AM~(6~of~7)2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004-11-2004$

flickering is not present in an LCD display.
Q: Why is an LCD monitor virtually free of Electro Magnetic Interference?
A: Unlike a CRT, an LCD monitor does not have key parts that generate Electro Magnetic Interference, especially magnetic fields. Also, since an LCD display utilizes relatively low power, its power supply is extremely quiet.
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Ergonomics, Ecology and Safety Standards
Q: What is the CE mark?
A: The CE (Conformité Européenne) mark is required to be displayed on all regulated products offered for sale on the European market. This 'CE' mark means that a product complies with the relevant European Directive. A European Directive is a European 'Law' that relates to health, safety, environment and consumer protection, much the same as the U. S. National Electrical Code and UL Standards.
Q: Does the LCD monitor conform to general safety standards?
A: Yes. Philips LCD monitors conform to the guidelines of MPR-II and TCO 99/03 standards for the control of radiation, electromagnetic waves, energy reduction, electrical safety in the work environment and recyclability. The specification page provides detailed data on safety standards.
More information is provided in the Regulatory Information section.
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- Safety and Troubleshooting
- FAQs
- Common Problems
- Imaging Problems
- Regulatory Information
- Other Related Information

Troubleshooting

This page deals with problems that can be corrected by the user. If the problem still persists after you have tried these solutions, contact your nearest Philips dealer.

Common Problems	
Having this problem?	Check these items
No Picture (Power LED not lit)	 Make sure the power cord is plugged into the power outlet and into the back of the monitor. First, ensure that the power button on the front of the monitor is in the OFF position, then press it to the ON position.
No Picture (Power LED is amber or yellow)	 Make sure the computer is turned on. Make sure the signal cable is properly connected to your computer. Check to see if the monitor cable has bent pins. The Energy Saving feature may be activated
Screen says ATTENTION NO VIDEO INPUT	 Make sure the monitor cable is properly connected to your computer. (Also refer to the Quick Set-Up Guide). Check to see if the monitor cable has bent pins. Make sure the computer is turned on.
Screen says ATTENTION THIS IS 85HZ OVERDRIVE, CHANGE COMPUTER DISPLAY INPUT TO 1280X1024@60HZ	 Make sure the vertical sync of input signal is within the range of 56 ~ 75 Hz. Change the refresh rate to 56~75Hz within 10 minutes. Re-power on monitor to start over again if you failed to change the refresh rate within 10 minutes.

AUTO button not working properly

- The Auto Function is designed for use on standard Macintosh or IBM-compatible PCs running Microsoft Windows.
- It may not work properly if using nonstandard PC or video card.

Imaging Problems

Display position is incorrect

- Press the Auto button.
- Adjust the image position using the Horizontal Position and/or Vertical Position in OSD Main Controls.

Image vibrates on the screen

• Check that the signal cable is properly connected to the graphics board or PC.

Vertical flicker appears



- Press the Auto button.
- Eliminate the vertical bars using the Clock Adjustment of VIDEO NOISE in OSD Main Controls.

Horizontal flicker appears





- Press the Auto button.
- Eliminate the horizontal bars using the Phase Adjustment of VIDEO NOISE in OSD Main Controls.

The screen is too bright or too dark

 Adjust the contrast and brightness on OSD Main Controls. (The backlight of the LCD monitor has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer).

An after-image appears

 If an image remains on the screen for an extended period of time, it may be imprinted in the screen and leave an afterimage. This usually disappears after a few hours An after-image remains after the power has been turned off.

 This is characteristic of liquid crystal and is not caused by a malfunction or deterioration of the liquid crystal. The after-image will disappear after a peroid of time.

Green, red, blue, dark, and white dots remains

 The remaining dots are normal characteristic of the liquid crystal used in today's technology.

For further assistance, refer to the Consumer Information Centers list and contact your local Philips distributor.

- TCO'99
 Information
- TCO'99
 Environmental
 Requirements
- TCO'03
 Information
- Recycling Information for Customers
- CE Declaration of Conformity
- Energy Star Declaration
- Federal Communications Commission (FCC) Notice (U. S. Only)
- Commission
 Federale de la
 Communication
 (FCC
 Declaration)
- EN 55022
 Compliance
 (Czech Republic
 Only)
- VCCI Class 2 Notice (Japan Only)
- MIC Notice (South Korea Only)
- Polish Center for Testing and Certification Notice
- North Europe (Nordic Countries) Information
- BSMI Notice (Taiwan Only)
- Ergonomie
 Hinweis (nur
 Deutschland)

Regulatory Information

TCO '99 Information



Congratulations! You have just purchased a TCO '99 approved and labeled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

Why do we have environmentally labeled computers?

In many countries, environmental labeling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labeling involve?

This product meets the requirements for the TCO'99 scheme which provides for international and environmental labeling of personal computers. The labeling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: environment, ergonomics, usability, emission of electric and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labeled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

- Philips End-of-Life Disposal Information for UK only
- TroubleshootingOther RelatedInformation
- Frequently Asked Questions (FAQs)

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development

SE-114 94 Stockholm, Sweden

Fax: +46 8 782 92 07

Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labeled products may also be obtained via the Internet, using the address: http://www.tco-info.com/

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Environmental Requirements

Flame retardants

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in fetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium**

Cadmium is present in rechargeable batteries and in the color-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the color-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

Mercury**

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labeled unit.

CFCs (freons)

The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with increased risks e.g. skin cancer (malignant melanoma) as a consequence.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

- * Bio-accumulative is defined as substances which accumulate within living organisms.
- ** Lead, Cadmium and Mercury are heavy metals which are bio-accumulative.

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TCO'03 Information

(Optional, only available for TCO'03 version)





Congratulations!

The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

Some of the features of the TCO'03 Display requirements.

Ergonomics

 Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resoluction, reflectance, colour rendition and image stability.

Energy

- Energy-saving mode after a certain time-beneficial both for the user and the environment
- Electrical safety

Emissions

- Electromagnetic fields
- Noise emissions

Ecology

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 000
- Restrictions on
 - chlorinated and brominated flame retardants and polymers
 - o heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit www.tcodevelopment.com

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Recycling Information for Customers

Philips establishes technically and economically viable objectives to optimize the environmental performance of the organization's product, service and activities.

From the planning, design and production stages, Philips emphasizes the important of making products that can easily be recycled. At Philips, end-of-life management primarily entails participation in national take-back initiatives and recycling programs whenever possible, preferably in cooperation with competitors.

There is currently a system of recycling up and running in the European countries, such as The Netherlands, Belgium, Norway, Sweden and Denmark.

In U.S.A., Philips Consumer Electronics North America has contributed funds for the Electronic Industries Alliance (EIA) Electronics Recycling Project and state recycling initiatives for end-of-life electronics products from household sources. In addition, the Northeast Recycling Council (NERC) - a multi-state non-profit organization focused on promoting recycling market development - plans to implement a recycling program.

In Asia Pacific, Taiwan, the products can be taken back by Environment Protection Administration (EPA) to follow the IT product recycling management process, detail can be found in web site www. epa.gov.tw

For help and service, please contact Consumers Information Center or F1rst Choice Contact

Information Center in each country or the following team of Environmental specialist can help.

Mr. Job Chiu - Environment manager

Philips Electronics Industries (Taiwan) Ltd, Monitor Business Unit

E-mail: job.chiu@philips.com Tel: +886 (0) 3 454 9839

Mr. Maarten ten Houten - Senior Environmental Consultant

Philips Consumer Electronics

E-mail: marten.ten.houten@philips.com

Tel: +31 (0) 40 27 33402

Mr. Delmer F. Teglas

Philips Consumer Electronics North America

E-mail: butch.teglas@philips.com

Tel: +1 865 521 4322

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CE Declaration of Conformity

Philips Consumer Electronics declare under our responsibility that the product is in conformity with the following standards

- EN60950:2000 (Safety requirement of Information Technology Equipment)
- EN55022:1998 (Radio Disturbance requirement of Information Technology Equipment)
- EN55024:1998 (Immunity requirement of Information Technology Equipment)
- EN61000-3-2:2000 (Limits for Harmonic Current Emission)
- EN61000-3-3:1995 (Limitation of Voltage Fluctuation and Flicker)

following provisions of directives applicable

- 73/23/EEC (Low Voltage Directive)
- 89/336/EEC (EMC Directive)
- 93/68/EEC (Amendment of EMC and Low Voltage Directive)

and is produced by a manufacturing organization on ISO9000 level.

The product also comply with the following standards

- ISO9241-3, ISO9241-7, ISO9241-8 (Ergonomic requirement for Visual Display)
- ISO13406-2 (Ergonomic requirement for Flat panels)
- GS EK1-2000 (GS specification)
- prEN50279:1998 (Low Frequency Electric and Magnetic fields for Visual Display)
- MPR-II (MPR:1990:8/1990:10 Low Frequency Electric and Magnetic fields)
- TCO'99, TCO'03 (Requirement for Environment Labelling of Ergonomics, Energy, Ecology and Emission, TCO: Swedish Confederation of Professional Employees) for TCO versions

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Energy Star Declaration

PHILIPS 170C5

This monitor is equipped with a function for saving energy which supports the VESA Display Power Management Signaling (DPMS) standard. This means that the monitor must be connected to a computer which supports VESA DPMS to fulfill the requirements in the NUTEK specification 803299/94. Time settings are adjusted from the system unit by software.

NUTEK	VESA State	LED Indicator	Power Consumption
Normal operation	ON (Active)	Green	< 35 W
Power Saving Alternative 2 One step	OFF (Sleep)	Amber	< 1 W
	Switch Off	Off	< 1 W



As an ENERGY STAR® Partner, PHILIPS has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



We recommend you switch off the monitor when it is not in use for quite a long time.

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Federal Communications Commission (FCC) Notice (U.S. Only)



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Use only RF shielded cable that was supplied with the monitor when connecting this monitor to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

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Commission Federale de la Communication (FCC Declaration)



Cet équipement a été testé et déclaré conforme auxlimites des appareils numériques de class B, aux termes de l'article 15 Des règles de la FCC. Ces limites sont conçues de façon à fourir une protection raisonnable contre les interférences nuisibles dans le cadre d'une installation résidentielle. CET appareil produit, utilise et peut émettre des hyperfréquences qui, si l'appareil n'est pas installé et utilisé selon les consignes données, peuvent causer des interférences nuisibles aux communications radio. Cependant, rien ne peut garantir l'absence d'interférences dans le cadre d'une installation particulière. Si cet appareil est la cause d'interférences nuisibles pour la réception des signaux de radio ou de télévision, ce qui peut être décelé en fermant l'équipement, puis en le remettant en fonction, l'utilisateur pourrait essayer de corriger la situation en prenant les mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur un autre circuit que celui utilisé par le récepteur.
- Demander l'aide du marchand ou d'un technicien chevronné en radio/télévision.



Toutes modifications n'ayant pas reçu l'approbation des services compétents en matière de conformité est susceptible d'interdire à l'utilisateur l'usage du présent équipement.

N'utiliser que des câbles RF armés pour les connections avec des ordinateurs ou périphériques.

CET APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

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EN 55022 Compliance (Czech Republic Only)

This device belongs to category B devices as described in EN 55022, unless it is specifically stated that it is a Class A device on the specification label. The following applies to devices in Class A of EN 55022 (radius of protection up to 30 meters). The user of the device is obliged to take all steps necessary to remove sources of interference to telecommunication or other devices.

Pokud není na typovém štitku počítače uvedeno, že spadá do do třídy A podle EN 55022, spadá automaticky do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (chranné pásmo 30m) podle EN 55022 platí následující. Dojde-li k rušení telekomunikačních nebo jiných zařízení je užívatel povinnen provést taková opatřgní, aby rušení odstranil.

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VCCI Notice (Japan Only)

This is a Class B product based on the standard of the Voluntary Control Council for Interference (VCCI) for Information technology equipment. If this equipment is used near a radio or television receiver in a domestic environment, it may cause radio Interference. Install and use the equipment according to the instruction manual.



この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準 に基づくクラス B 情報技術装置です。この装置は家庭環境で使用すること を目的としていますが、この装置がラジオやテレビジョン受信機に近接して 使用されると、受信障害を引き起こすことがあります。 取扱説明書に従って正しい取り扱いをして下さい。

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MIC Notice (South Korea Only)

Class B Device

	장치 종류
서 주거지역	B급 기기
서	B급 기기



Please note that this device has been approved for non-business purposes and may be used in any environment, including residential areas.

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Polish Center for Testing and Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a three-prong socket). All equipment that works together (computer, monitor, printer, and so on) should have the same power supply source.

The phasing conductor of the room's electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark "B" confirms that the equipment is in compliance with the protection usage requirements of standards PN-93/T-42107 and PN-89/E-06251.

Wymagania Polskiego Centrum Badań i Certyfikacji

Urządzenie powinno być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kołkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukarka) powinny być zasilane z tego samego źródla.

Instalacja elektryczna pomieszczenia powinna zawierać w przewodzie fazowym rezerwową ochronę przed zwarciami, w postaci bezpiecznika o wartości znamionowej nie większej niż 16A (amperów).

W celu całkowitego wyłączenia urządzenia z sieci zasilania, należy wyjąć wtyczkę kabla zasilającego z gniazdka, które powinno znajdować się w pobliżu urządzenia i być łatwo dostępne.

Znak bezpieczeństwa "B" potwierdza zgodność urządzenia z wymaganiami bezpieczeństwa użytkowania zawartymi w PN-93/T-42107 i PN-89/E-06251.

Pozostałe instrukcje bezpieczeństwa

- Nie należy używać wtyczek adapterowych lub usuwać kołka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żyłowego z prawidłowo połączonym przewodem ochronnym.
- System komputerowy należy zabezpieczyć przed nagłymi, chwilowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezzakłóceniowego źródła zasilania.
- Należy upewnić się, aby nic nie leżało na kabłach systemu komputerowego, oraz aby kabłe nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub potykać się o nie.
- Nie należy rozlewać napojów ani innych płynów na system komputerowy.
- Nie należy wpychać żadnych przedmiotów do otworów systemu komputerowego, gdyż może to spowodować pożar lub porażenie prądem, poprzez zwarcie elementów wewnętrznych.
- System komputerowy powinien znajdować się z dala od grzejników i źródeł ciepla. Ponadto, nie należy blokować otworów wentylacyjnych. Należy unikać kładzenia lużnych papierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

North Europe (N	Nordic Cou	ıntries) In	formation
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Placering/Ventilation

VARNING:

FÖRSÄKRA DIG OM ATT HUVUDBRYTARE OCH UTTAG ÄR LÄTÅTKOMLIGA, NÄR DU STÄLLER DIN UTRUSTNING PÅPLATS.

Placering/Ventilation

ADVARSEL:

SØRG VED PLACERINGEN FOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMT TILGÆNGELIGE.

Paikka/Ilmankierto

VAROITUS:

SIJOITA LAITE SITEN, ETTÄ VERKKOJOHTO VOIDAAN TARVITTAESSA HELPOSTI IRROTTAA PISTORASIASTA.

Plassering/Ventilasjon

ADVARSEL:

NÅR DETTE UTSTYRET PLASSERES, MÅ DU PASSE PÅ AT KONTAKTENE FOR STØMTILFØRSEL ER LETTE Å NÅ.

RETURN TO TOP OF THE PAGE

BSMI Notice (Taiwan Only)

符合乙類資訊產品之標準

Ergonomie Hinweis (nur Deutschland)

Der von uns gelieferte Farbmonitor entspricht den in der "Verordnung über den Schutz vor Schäden durch Röntgenstrahlen" festgelegten Vorschriften.

Auf der Rückwand des Gerätes befindet sich ein Aufkleber, der auf die Unbedenklichkeit der Inbetriebnahme hinweist, da die Vorschriften über die Bauart von Störstrahlern nach Anlage III ¤ 5 Abs. 4 der Röntgenverordnung erfüllt sind.

Damit Ihr Monitor immer den in der Zulassung geforderten Werten entspricht, ist darauf zu achten, daß

- 1. Reparaturen nur durch Fachpersonal durchgeführt werden.
- 2. nur original-Ersatzteile verwendet werden.
- 3. bei Ersatz der Bildröhre nur eine bauartgleiche eingebaut wird.

Aus ergonomischen Gründen wird empfohlen, die Grundfarben Blau und Rot nicht auf dunklem Untergrund zu verwenden (schlechte Lesbarkeit und erhöhte Augenbelastung bei zu geringem Zeichenkontrast wären die Folge).

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 beträgt 70dB (A) oder weniger.



ACHTUNG: BEIM AUFSTELLEN DIESES GERÄTES DARAUF ACHTEN, DAß NETZSTECKER UND NETZKABELANSCHLUß LEICHT ZUGÄNGLICH SIND.

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End-of-Life Disposal

Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor from your local Philips dealer.

(For customers in Canada and U.S.A.)

This product may contain lead and/or mercury. Dispose of in accordance to local-state and federal regulations.

For additional information on recycling contact www.eia.org (Consumer Education Initiative)

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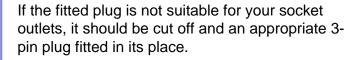
Information for UK only

WARNING - THIS APPLIANCE MUST BE EARTHED.

Important:

This apparatus is supplied with an approved moulded 13A plug. To change a fuse in this type of plug proceed as follows:

- 1. Remove fuse cover and fuse.
- 2. Fit new fuse which should be a BS 1362 5A,A. S.T.A. or BSI approved type.
- 3. Refit the fuse cover.



If the mains plug contains a fuse, this should have a value of 5A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5A.

Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13A socket elsewhere.



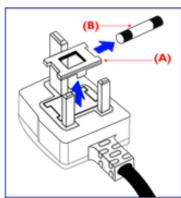
The wires in the mains lead are coloured in accordance with the following code:

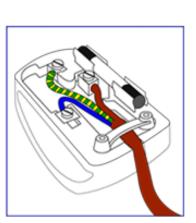
BLUE - "NEUTRAL" ("N")

BROWN - "LIVE" ("L")

GREEN & YELLOW - "EARTH" ("E")

- 1. The GREEN AND YELLOW wire must be connected to the terminal in the plug which is marked with the letter "E" or by the Earth symbol
- 2. The BLUE wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
- 3. The BROWN wire must be connected to the





Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the three wires.

- Safety and **Troubleshooting**
- FAQs
- Regulatory Information
- Information for Users in the U.S
- Information for Users Outside the U.S

Other Related Information

• Troubleshooting Information for Users in the U. S.

For units set at 115 V:

Use a UL Listed Cord Set consisting of a minimum 18 AWG, Type SVT or SJT three conductor cord a maximum of 15-feet long and a parallel blade, grounding type attachment plug rated 15 A, 125 V.

For units set at 230 V:

Use a UL Listed Cord Set consisting of a minimum 18 AWG, Type SVT or SJT three conductor cord a maximum of 15-feet long and a tandem blade, grounding type attachment plug rated 15 A, 250 V.

Information for Users outside the U.S.

For units set at 230 V:

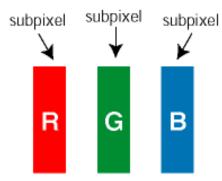
Use a Cord Set consisting of a minimum 18 AWG cord and grounding type attachment plug rated 15 A, 250 V. The Cord Set should have the appropriate safety approvals for the country in which the equipment will be installed and / or be marked HAR.

- Product **Features**
- Technical **Specifications**
- Resolution & **Preset Modes**
- Automatic
- Physical Specification
- Pin Assignment
- Product **Views**

Philips Pixel Defect Policy

Philips' Flat Panel Monitors Pixel Defect Policy

Philips strives to deliver the highest quality products. We use some of the industry's most advanced Power Saving manufacturing processes and practice stringent quality control. However, pixel or sub pixel defects on the TFT LCD panels used in flat panel monitors are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but Philips guarantees that any monitor with an unacceptable number of defects will be repaired or replaced under warranty. This notice explains the different types of pixel defects and defines acceptable defect levels for each type. In order to qualify for repair or replacement under warranty, the number of pixel defects on a TFT LCD panel must exceed these acceptable levels. For example, no more than 0.0004% of the sub pixels on a 15" XGA monitor may be defective. Furthermore, Philips sets even higher quality standards for certain types or combinations of pixel defects that are more noticeable than others. This policy is valid worldwide.





Pixels and Sub pixels

A pixel, or picture element, is composed of three sub pixels in the primary colors of red, green and blue. Many pixels together form an image. When all sub pixels of a pixel are lit, the three colored sub pixels together appear as a single white pixel. When all are dark, the three colored sub pixels together appear as a single black pixel. Other combinations of lit and dark sub pixels appear as single pixels of other colors.

Types of Pixel Defects

Pixel and sub pixel defects appear on the screen in different ways. There are two categories of pixel defects and several types of sub pixel defects within each category.

Bright dot defects appear as pixels or sub pixels that are always lit or 'on'. These are the types of bright dot defects:







One lit red, green or blue sub pixel

Two adjacent lit sub pixels:

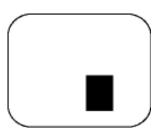
- Red + Blue = Purple
- Red + Green = Yellow
- Green + Blue = Cyan (Light Blue)

Three adjacent lit sub pixels (one white pixel)

Black Dot Defects Black dot defects appear as pixels or sub pixels that are always dark or 'off'. These are the types of black dot defects:







Two or three adjacent dark sub pixels

Proximity of Pixel Defects

Because pixel and sub pixels defects of the same type that are near to one another may be more noticeable, Philips also specifies tolerances for the proximity of pixel defects.

Pixel Defect Tolerances

In order to qualify for repair or replacement due to pixel defects during the warranty period, a TFT LCD panel in a Philips flat panel monitor must have pixel or sub pixel defects exceeding the tolerances listed in the following tables.

BRIGHT DOT DEFECTS	ACCEPTABLE LEVEL	
MODEL	150C5	170C5
1 lit subpixel	4 or fewer	4 or fewer
2 adjacent lit subpixels	2 or fewer	2 or fewer

3 adjacent lit subpixels (one white pixel)	0	0
Distance between two bright dot defects*	15 mm or more	15 mm or more
Total bright dot defects of all types	4 or fewer	4 or fewer

BLACK DOT DEFECTS	ACCEPTAI	BLE LEVEL
MODEL	150C5	170C5
1 dark subpixel	4 or fewer	4 or fewer
2 adjacent dark subpixels	2 or fewer	2 or fewer
3 adjacent dark subpixels	0	0
Distance between two black dot defects*	15 mm or more	15 mm or more
Total black dot defects of all types	4 or fewer	4 or fewer

TOTAL DOT DEFECTS	ACCEPTABLE	ELEVEL
MODEL	150C5	170C5
Total bright or black dot defects of all types	5 or fewer	5 or fewer

Note:

* 1 or 2 adjacent sub pixel defects = 1 dot defect

All Philips monitors are ISO13406-2 Compliant

Connecting to Your PC

- Front View Product Description
- Accessory Pack
- Connecting to Your PC
- Getting Started
- Optimizing Performance
- Base

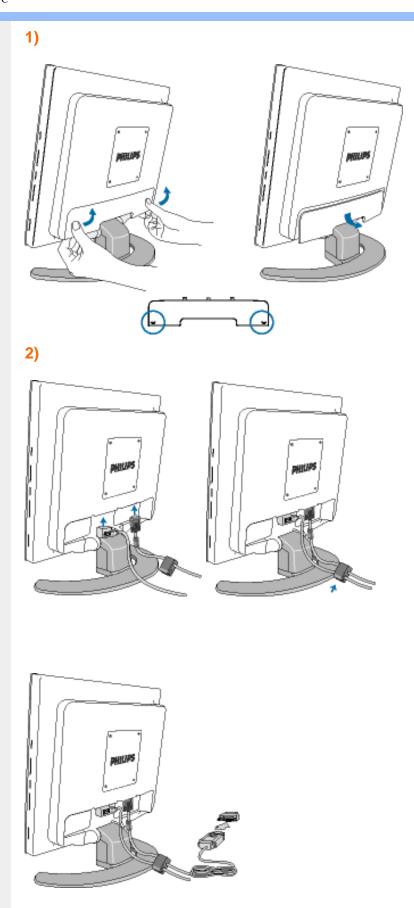
Accessory Pack

Unpack all the parts.

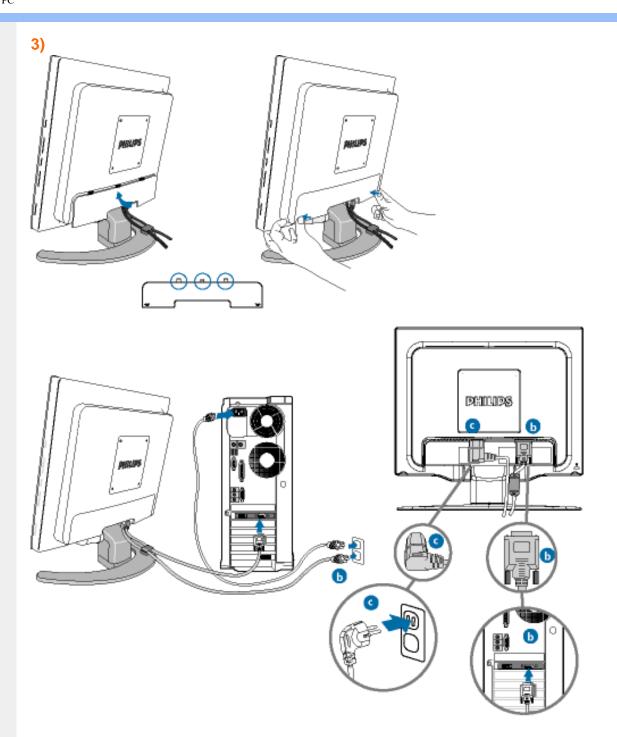
Item	Description
	1) Power Cable (socket may differ for different countries)
	2) Macintosh Adapter (optional)
	3) VGA Signal Cable
	4) E-DFU package with Quick Setup Guide and CD-ROM.

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Connecting to Your PC



Note: If you use an Apple Macintosh, you need to connect the special Mac adapter to one end of the monitor signal cable.



4) Connect to PC

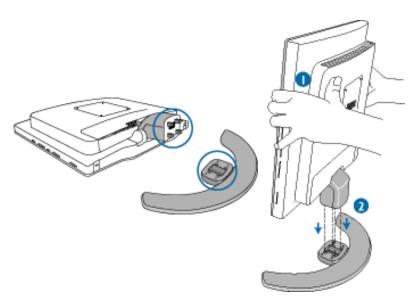
- (a) Turn off your computer and unplug its power cable.
- (b) Connect the monitor signal cable to the video connector on the back of your computer.
- (c) Plug the power cord of your computer and your monitor into a nearby outlet.
- (d) Turn on your computer and monitor. If the monitor displays an image, installation is complete.

Base

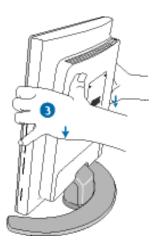
- Front View Product Description
- AccessoryPack
- Connecting to your PC
- Getting Started
- Optimizing Performance
- To attach the base
- To detach the base
- To remove the Base

Attaching and detaching the base

To attach the base:

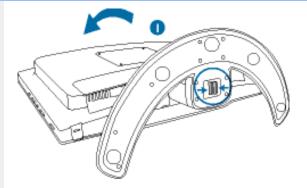


- 1) Hold the monitor body with both hands.
- 2) Align four-pronged base attachment unit on the bottom of the screen with the four socket holes on the base.

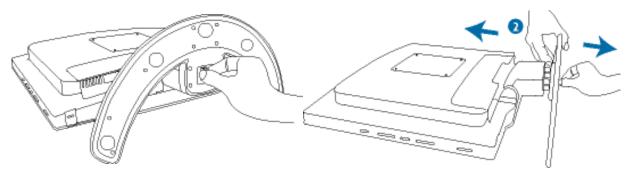


3) Firmly fix screen into the base plate.

To detach the base:



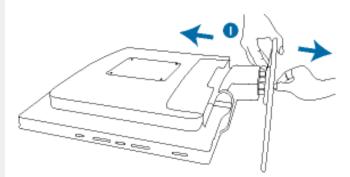
1) Place the monitor face down a smooth surface taking care to avoid scratching or damaging the screen.



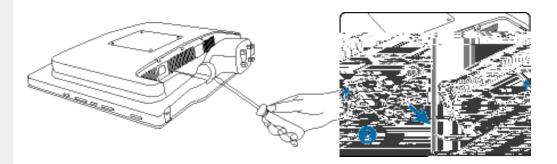
2) Press the release latches on the bottom of the base together and gently remove the attachment unit from the base.

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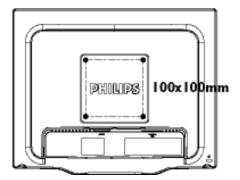
To remove the base for VESA standard mounting applications



1) Detach the screen from the base.



2) Remove the screws and then detach the base attachment unit from the LCD monitor.



Note: This monitor is designed to work with a 100mm x 100mm VESA-compliant mounting interface.

Your LCD Monitor :

- Front View Product Description
- Connecting to Your PC
- Getting Started
- Optimizing Performance

Getting Started

Getting Started

Use the information file (.inf) for Windows® 95/98/2000/Me/XP or later

The built-in VESA DDC2B feature in Philips Monitors supports Plug & Play requirements for Windows® 95/98/2000/Me/XP. This information file (.inf) should be installed in order that your Philips monitor can be enabled from the 'Monitor' dialog box in Windows® 95/98/2000/Me/XP and the Plug & Play application can be activated. The installation procedure based on Windows® '95 OEM Release 2 , 98 , Me, XP and 2000 is specified as follows.

For Windows® 95

- 1. Start Windows® '95.
- 2. Click on the 'Start' button, point to 'Settings', and then click on 'Control Panel'.
- 3. Double click on the 'Display' icon.
- 4. Select the 'Settings' tab then click on 'Advanced...'.
- 5. Select the 'Monitor' button, point to 'Change...' then click on 'Have Disk...'.
- 6. Click on the 'Browse...' button, select the appropriate drive F: (CD-ROM Drive) then click on the 'OK' button.
- 7. Click on the 'OK' button then select your monitor model and click on 'OK'.
- 8. Click on the 'Close' button.

For Windows® 98

- 1. Start Windows® 98.
- 2. Click on the 'Start' button, point to 'Settings', and then click on 'Control Panel'.
- 3. Double click on the 'Display' icon.
- 4. Select the 'Settings' tab then click on 'Advanced...'.
- 5. Select the 'Monitor' button, point to 'Change...' then click on 'Next'
- 6. Select 'Display a list of all the drivers in a specific location, so you can choose the driver you want.' then click on 'Next' and then click on 'Have Disk...'.
- 7. Click on the 'Browse...' button, select the appropriate drive F: (CD-ROM Drive) then click on the 'OK' button.
- 8. Click on the 'OK' button then select your monitor model and click on the 'Next' button.
- 9. Click on the 'Finish' button then the 'Close' button.

For Windows® Me

- 1. Start Windows® Me.
- 2. Click on the 'Start' button, point to 'Settings', and then click on 'Control Panel'.
- 3. Double click on the 'Display' icon.
- 4. Select the 'Settings' tab then click on 'Advanced...'.
- 5. Select the 'Monitor' button, then click on 'Change...' button.

- 6. Select 'Specify the location of the driver(Advanced)' and click on the 'Next' button.
- 7. Select 'Display a list of all the drivers in a specific location, so you can choose the driver you want', then click on 'Next' and then click on 'Have Disk...'.
- 8. Click on the 'Browse...' button, select the appropriate drive F: (CD-ROM Drive) then click on the 'OK' button.
- 9. Click on the 'OK' button, select your monitor model and click on the 'Next' button.
- 10. Click on 'Finish' button then the 'Close' button.

For Windows® 2000

- 1. Start Windows® 2000.
- 2. Click on the 'Start' button, point to 'Settings', and then click on 'Control Panel'.
- 3. Double click on the 'Display' icon.
- 4. Select the 'Settings' tab then click on 'Advanced...'.
- 5. Select 'Monitor'
 - If the 'Properties' button is inactive, it means your monitor is properly configured. Please stop installation.
 - If the 'Properties' button is active. Click on 'Properties' button. Please follow the steps given below.
- 6. Click on 'Driver' and then click on 'Update Driver...' then click on the 'Next' button.
- 7. Select 'Display a list of the known drivers for this device so that I can choose a specific driver', then click on 'Next' and then click on 'Have disk...'.
- 8. Click on the 'Browse...' button then select the appropriate drive F: (CD-ROM Drive).
- 9. Click on the 'Open' button, then click on the 'OK' button.
- 10. Select your monitor model and click on the 'Next' button.
- 11. Click on the 'Finish' button then the 'Close' button.

 If you can see the 'Digital Signature Not Found' window, click on the 'Yes' button.

For Windows® XP

- 1. Start Windows® XP.
- 2. Click on the 'Start' button and then click on 'Control Panel'.
- 3. Select and click on the category 'Printers and Other Hardware'
- 4. Click on the 'Display' Item.
- 5. Select the 'Settings' tab then click on the 'Advanced' button.
- 6. Select 'Monitor' tab
 - If the 'Properties' button is inactive, it means your monitor is properly configured. Please stop installation.
 - If the 'Properties' button is active, click on 'Properties' button.
 - Please follow the steps below.
- 7. Click on the 'Driver' tab and then click on 'Update Driver...' button.
- 8. Select the 'Install from a list or specific location [advanced]' radio button and then click on the 'Next' button.
- 9. Select the 'Don't Search. I will choose the driver to install' radio button. Then click on the 'Next' button.
- 10. Click on the 'Have disk...' button, then click on the 'Browse...' button and then select the appropriate drive F: (CD-ROM Drive).
- 11. Click on the 'Open' button, then click the 'OK' button.
- 12. Select your monitor model and click on the 'Next' button.
 - If you can see the 'has not passed Windows® Logo testing to verify its compatibility with Windows® XP' message, please click on the 'Continue Anyway' button.
- 13. Click on the 'Finish' button then the 'Close' button.
- 14. Click on the 'OK' button and then the 'OK' button again to close the Display Properties

dialog box.

If your Windows® 95/98/2000/Me/XP version is different or you need more detailed installation information, please refer to Windows® 95/98/2000/Me/XP user's manual.

Your Philips F1rst Choice Warranty

Thank you for purchasing this Philips monitor.



All Philips monitors are designed and manufactured to high standards and deliver high-quality performance, ease of use and ease of installation. Should you encounter any difficulties while installing or using this product, please contact the Philips helpdesk directly to benefit from your Philips F1rst Choice Warranty. This three-year service warranty entitles you to a swap model on-site if your monitor turns out to be faulty or defective. Philips aims at a swap within 48 hours of your call being received.

What is covered?

The Philips F1rst Choice Warranty applies within Andorra, Austria, Belgium, Cyprus, Denmark, France, Germany, Greece, Finland, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, the Netherlands, Norway, Portugal, Sweden, Switzerland, Spain and the United Kingdom and only for monitors originally designed, manufactured, approved and/or authorized for usage within these countries.

Warranty coverage begins as from the day you buy your monitor. For three years thereafter, your monitor will be swapped by at least an equivalent monitor in case of defects provided for under the warranty coverage.

The swap monitor remains yours and Philips keeps the defective/original monitor. For the swap monitor the warranty period remains equal to that of your original monitor, being 36 months as from the purchase date of your original monitor.

What is excluded?

The Philips F1rst Choice Warranty applies provided the product is handled properly for its intended use, in accordance with its operating instructions and upon presentation of the original invoice or cash receipt, indicating the date of purchase, dealer's name and model and production number of the product.

The Philips F1rst Choice Warranty may not apply if:

- The documents have been altered in any way or made illegible;
- The model or production number on the product has been altered, deleted, removed or made illegible;
- Repairs or product modifications and alterations have been executed by unauthorized service organizations or persons;
- Damage is caused by accidents including but not limited to lightning, water or fire, misuse or neglect;

- Reception problems caused by signal conditions or cable or antenna systems outside the unit;
- Defects caused by abuse or misuse of the monitor;
- Product requires modification or adaptation to enable it to comply with local or national technical standards, which apply in countries for which the product was not originally designed, manufactured, approved and/or authorized. Therefore always check whether a product can be used in a specific country.
- Note that products that are not originally designed, manufactured, approved and/or authorized for usage within the Philips F1rst Choice countries, do not apply to the Philips F1rst Choice Warranty. In these cases the Philips global warranty terms are valid.

Just a click away

In case of any problems, we advise you to read the operating instructions carefully or go to the www. philips.com/support website for additional support.

Just a phone call away

In order to avoid unnecessary inconvenience, we advise you to read the operating instructions carefully or go to the www.philips.com/support website for additional support before contacting the Philips helpdesk.

To solve your problem quickly, please prepare the following details before contacting the Philips helpdesk:

- Philips type number
- Philips serial number
- Purchase date (copy of purchase may be required)
- PC environment Processor:
 - 286/386/486/Pentium Pro/Internal memory
 - Operating system (Windows, DOS, OS/2, MAC)
 - o Fax/Modem/Internet program?
- Other cards installed

Having the following information available will also help speed up the process:

- Your proof of purchase indicating: date of purchase, dealer name, model and product serial number.
- The full address to which the faulty monitor has to be collected and the swap model should be delivered.

Philips' customer help desks are located worldwide. Click here to access the F1rst Choice Contact Information.

Or you can reach us via:

Website: http://www.philips.com/support



Your Guarantee in Central and Eastern Europe

Dear Customer,

Thank you for purchasing this Philips product, which has been designed and manufactured to the highest quality standards. If, unfortunately, something should go wrong with this product Philips guarantees free of charge labor and replacement parts during a period of 36 months from date of purchase.

What is covered?

This Philips Guarantee in Central and Eastern Europe applies within Czech Republic, Hungary, Slovakia, Slovenia, Poland, Russia and Turkey and only for monitors originally designed, manufactured, approved and/or authorized for usage within these countries.

Warranty coverage begins as from the day you buy your monitor. For 3 years thereafter, your monitor will be serviced in case of defects provided for under the warranty coverage.

What is excluded?

The Philips guarantee applies provided the product is handled properly for its intended use, in accordance with its operating instructions and upon presentation of the original invoice or cash receipt, indicating the date of purchase, dealer's name and model and production number of the product.

The Philips guarantee may not apply if:

- the documents have been altered in any way or made illegible;
- the model or production number on the product has been altered, deleted, removed or made illegible:
- repairs or product modifications and alterations have been executed by unauthorized service organizations or persons;
- damage is caused by accidents including but not limited to lightning, water or fire, misuse or neglect.
- Reception problems caused by signal conditions or cable or antenna systems outside the unit:
- Defects caused by abuse or misuse of the monitor;
- Product requires modification or adaptation to enable it to comply with local or national technical standards, which apply in countries for which the product was not originally designed, manufactured, approved and/or authorized. Therefore always check whether a product can be used in a specific country.

Please note that the product is not defective under this guarantee in the case where modifications become necessary in order for the product to comply with local or national technical standards

which apply in countries for which the product was not originally designed and/or manufactured. Therefore always check whether a product can be used in a specific country.

Just a click away

In case of any problems, we advise you to read the operating instructions carefully or go to the www. philips.com/support website for additional support.

Just a phone call away

In order to avoid unnecessary inconvenience, we advise you to read the operating instructions carefully before contacting our dealers or Information Centers

In case your Philips product is not working correctly or is defective, please contact your Philips dealer or directly the Philips Service and Consumer Information Centers

Website: http://www.philips.com/support

Your International Guarantee

Dear Customer,

Thank you for purchasing this Philips product which has been designed and manufactured to the highest quality standards.

If, unfortunately, something should go wrong with this product Philips guarantees free of charge labor and replacement parts irrespective of the country where it is repaired during a period of 12 months from date of purchase. This international Philips guarantee complements the existing national guarantee obligations to you of dealers and Philips in the country of purchase and does not affect your statutory rights as a customer.

The Philips guarantee applies provided the product is handled properly for its intended use, in accordance with its operating instructions and upon presentation of the original invoice or cash receipt, indicating the date of purchase, dealer's name and model and production number of the product.

The Philips guarantee may not apply if:

- the documents have been altered in any way or made illegible;
- the model or production number on the product has been altered, deleted, removed or made illegible:
- repairs or product modifications and alterations have been executed by unauthorized service organizations or persons;
- damage is caused by accidents including but not limited to lightning, water or fire, misuse or neglect.

Please note that the product is not defective under this guarantee in the case where modifications become necessary in order for the product to comply with local or national technical standards which apply in countries for which the product was not originally designed and/or manufactured. Therefore always check whether a product can be used in a specific country.

In case your Philips product is not working correctly or is defective, please contact your Philips dealer. In the event you require service whilst in another country a dealer address can be given to you by the Philips Consumer Help Desk in that country, the telephone and fax number of which can be found in the relevant part of this booklet.

In order to avoid unnecessary inconvenience, we advise you to read the operating instructions carefully before contacting your dealer. If you have questions which your dealer cannot answer or any related question please contact the Philips Consumer Information Centers or via:

Website: http://www.philips.com

International Guarantee				

LIMITED WARRANTY (Computer Monitor)

Click here to access the Warranty Registration Card.

Three Years Free Labor / Three Years Free Service on Parts / One Year Exchange*

*Product will be exchanged with a new or renewed to original specifications unit within two business days for the first year. This product must be shipped in at your expense for service during years two and three.

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase. Attach it to this owner's manual and keep both nearby.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For three years thereafter, all parts will be repaired or replaced, and labor is free. After three years from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges.

All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the original product expires, the warranty on all replaced and repaired products and parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or

repair of products damaged by these modifications.

- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

Where IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics. In countries where Philips Consumer Electronics does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

Where CAN I GET MORE INFORMATION?

For more information, contact the Philips Customer Care Center by calling (877) 835-1838 (U.S.A. customers only) or (919) 573-7855.

Before Requesting Service...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE IN U.S.A., PUERTO RICO OR U.S. VIRGIN ISLANDS...

Contact the Philips Customer Care Center phone number listed below for product assistance and procedures for servicing:

Philips Customer Care Center

(877) 835-1838 or (919) 573-7855

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